

## **INCREASING ADOPTION OF HPC MODELING AND SIMULATION IN THE ADVANCED MANUFACTURING AND ENGINEERING INDUSTRIES**

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The official link for this solicitation is: [http://science.doe.gov/grants-pdf-SC\\_FOA\\_0000969.pdf](http://science.doe.gov/grants-pdf-SC_FOA_0000969.pdf)

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### **Description:**

Over the past 30 years, The Department of Energys (DOE) supercomputing program has played an increasingly important role in the scientific discovery process by allowing scientists to create more accurate models of complex systems, simulate problems once thought to be impossible, and analyze the increasing amount of data generated by experiments. Computational Science has become the third pillar of science, along with theory and experimentation. However despite the great potential of modeling and simulation to increase understanding of a variety of important engineering and manufacturing challenges, High Performance Computing (HPC) has been underutilized due to application complexity, the need for substantial in-house expertise, and perceived high capital costs. This topic is specifically focused on bringing HPC solutions and capabilities to the advanced manufacturing and engineering market sectors.